



AW

DOCKET NO.: 244257US8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Toshihiro SUZUKI, et al.

SERIAL NO: 10/690,524

GROUP: 2137

FILED: October 23, 2003

EXAMINER:

FOR: CONTROL DEVICE, HANDOVER CONTROL METHOD AND MOBILE
COMMUNICATION SYSTEM

LETTER

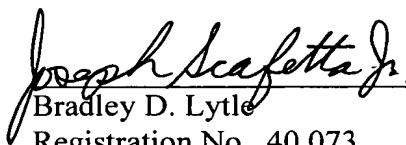
Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a European Office Action for the Examiner's consideration. The reference(s) cited therein have been previously filed on April 18, 2006.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.


Bradley D. Lytle

Registration No. 40,073

Joseph Scafetta, Jr.
Registration No. 26,803

Customer Number

22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 03/06)



EPA/EPO/DEB
D-80298 München
+49 89 2399-0
TX 523 656 epmu d
FAX +49 89 2399-4465

ANWÄLTE	
EING	2.6. Okt. 2006
Europäisches Patentamt	
Termin:	
WV	
Generaldirektion 2	

European
Patent Office

Directorate General 2

Office européen
des brevets

Direction Générale 2

GROSSE BOCKHORN SCHUMACHER
Patent- und Rechtsanwälte
Forstenrieder Allee 59
81476 München
ALLEMAGNE

Telephone numbers: Branch at The Hague

Primary Examiner (substantive examination) +31 70 340-4178

Formalities Officer / Assistant (Formalities and other matters) +31 70 340-0



Application No. 03 024 375.2 - 1249	Ref.	Date 23.10.2006
Applicant NTT DoCoMo, Inc.		

Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



E 1	
E 2	
E 3	11.2.2007
Frist: 26.2.2007	

Pérez, Manuel
Primary Examiner
for the Examining Division

Enclosure(s): 5 page/s reasons (Form 2906)



Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum
Date 23.10.2006
Date

Blatt
Sheet 1
Feuille

Anmelde-Nr.:
Application No.: 03 024 375.2
Demande n°:

The examination is being carried out on the **following application documents**:

Description, Pages

1-31 as originally filed

Claims, Numbers

1-13 as originally filed

Drawings, Sheets

1/14-14/14 as originally filed

1. Reference is made to the following documents; the numbering will be adhered to in the rest of the procedure:

D1: WO0135585

D2: WO0011901

D3: EP0602340

2. The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of claims 1, 12 and 13 is not new in the sense of Article 54(1) and (2) EPC.

2.1. The document D1 discloses (the references in parentheses applying to this document):

A control device, which constitutes a mobile communication system together with a mobile host, or a moving network comprising a plurality of mobile hosts, and a plurality of mutually connectable access interfaces each constituting an interface for



the connection to a core network at the mobile host or moving network (fig. 1, page 4, lines 25-27), and which serves to control a handover relating to the connection to the core network at the access interfaces (page 6, lines 4-6 and claims 7 and 15), comprising: connection status acquiring means for acquiring information on the connection status to the core network at each access interface, from each access interface (page 5, lines 8-12, page 10, lines 3-7, page 13, line 23-page 14, line 17 and claims 1-3); handover predicting means for predicting a subsequent handover on the basis of the information on the connection status to the core network at each access interface (page 14, lines 18-22, page 15, lines 10-20 and claim 5; there is a periodic search and comparison to decide when a better access exists and, consequently when a handover to that better access must be done) and changing means for dynamically changing the access interface adopted as the connection interface in accordance with predetermined logic when a predetermined condition is satisfied on the basis of the information on the connection status to the core network at each access interface or the prediction information for a subsequent handover (page 6, lines 4-6, page 15, lines 15-18 and fig. 4).

The subject-matter of claim 1 is therefore not new (Article 54(1) and (2) EPC).

It is furthermore noted that even if the applicant would interpret the disclosure of document D1 in a slightly different manner than the examiner has done in the above analysis, and based on his interpretations would come to the conclusion that there are differences between the subject matter of present claim 1 and D1 which would then establish novelty, then these differences, even if they could be acknowledged as such, would only be of so minor nature that they could not be the basis for establishing the presence of any inventive step, as D1 discloses the same object and the same type of solution as the present application, and claim 1 would, even with such a difference in interpretation, not meet the requirements of Article 56 EPC.

2.2. The subject-matter of independent claims 12 and 13 corresponds in terms of method and system features respectively to that of claim 1. The objection raised in respect of claim 1 also applies, mutatis mutandis, to claims 12 and 13.

Consequently, the subject-matter of claims 12 and 13 is not new (Articles 54(1) and 54(2) EPC).



Bescheid/Protokoll (Anlage)	Communication/Minutes (Annex)	Notification/Procès-verbal (Annexe)
Datum Date 23.10.2006	Blatt Sheet Feuille 3	Anmelde-Nr.: Application No.: 03 024 375.2 Demande n°:

Furthermore, due to the fact that in claim 12 is not specified that the handover prediction is based in the status of the link between the core network and the basis interface (as it's specified in claims 1 and 13), any mobile system which has several base stations (the base stations are access interfaces) and a handover control device (i.e. all the standard mobile systems) make the subject-matter of claim 12 not new (Article 54(1) and (2) EPC).

3. Dependent claims 2-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC in respect of novelty and/or inventive step. The reasons being as follows:

claims 4: see D1, page 15, lines 15-18

claim 3: the feature of connecting the mobile host to the appropriate access interface, not directly but through another access interface is a common known feature in the field of wireless communication systems (see for example, document D2, fig 4). The skilled person would therefore regard it as a normal option to include this feature in the device described in document D1.

claims 5: the feature of predicting a handover based on location information of the access interfaces (i.e. base stations) and the detected movement and speed of the mobile hosts, is a common known feature in the field of wireless communication systems (see for example, document D3, column 2, lines 3-49). The skilled person would therefore regard it as a normal option to include this feature in the device described in document D1.

claim 2, 6-11: These features are merely straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill.

4. The application does not meet the requirements of Article 84 EPC, because claims 2-4, 6, 7 are not clear.

4.1. The terms "adjacent switchings" and "switching time difference" used in claims 6 and 7 are vague and unclear and leaves the reader in doubt as to the meaning of the technical features to which they refers, thereby rendering the definition of the subject-matter of said claims unclear (Article 84 EPC).



4.2. The term "access router" used in claims 5-7 is ambiguous since it can be interpreted as that is part of the access interface or of the core network, thereby rendering the definition of the subject-matter of said claim unclear (Article 84 EPC). From the description and the drawings (page 8, lines 15-17 and fig.1), it is clear that the access router is in the core network. This feature must be clearly stated in the claims to overcome this objection.

4.3. In claims 2-4, it is mentioned "an appropriate access interface capable of maintaining a predetermined communication quality". This expression renders the subject-matter of said claims unclear (Article 84 EPC) because it is not clear if that "appropriate access interface" is the same as the interface selected by the changing means mentioned in claim 1 (on which claim 2-4 depend) and if the predetermined communication quality refers to the quality between the access interface and the core network.

4.4. On page 17, lines 1-2 of the description, it is stated that "a mobile host is allowed to transmit downlink data from the core network"; this statement is totally unclear (thereby resulting in lack of clarity of the claims (Article 84 EPC) when used to interpret them), because the downlink data is always transmitted from the core network **to the mobile host**, so it is not transmitted by the mobile host. The applicant is requested to clarify this statement.

4.5. When clarifying the expressions to overcome the clarity objections raised in the above paragraphs, the applicant must take care of **not adding subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC)**.

5. It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Should the applicant nevertheless regard some particular matter as patentable, an independent claim should be filed taking account of Rule 29(1) EPC. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.

5.1. When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims. Care should be taken during revision,



especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).

5.2. The features of the claims should be provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 29(7) EPC). This applies to both the preamble and characterising portion (see the Guidelines, C-III, 4.11).

5.3. To meet the requirements of Rule 27(1)(b) EPC, the document D1 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

5.4. The applicant is requested to effect the amendments by filing replacement pages for only those pages which have been amended. Unnecessary recasting of the description should be avoided. An amended abstract is not required. The applicant should also take account of the requirements of Rule 36(1) EPC. If handwritten amendments are submitted, they should be clearly legible for the printer. *According to the decision of the President of the EPO under Rule 35(2) EPC (OJ EPO 12/2001, 563) one set of the amended documents of the European patent application shall be provided.*

5.5. In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.